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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,828	01/27/2004	Patrick Petit	5681-78600	9079

58467 7590 02/03/2009

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EXAMINER	
TAYLOR, NICHOLAS R	
ART UNIT	PAPER NUMBER
2441	
MAIL DATE	DELIVERY MODE
02/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/765,828	PETIT, PATRICK	
	Examiner	Art Unit	
	Nicholas Taylor	2441	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,16-22,24-28 and 30-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16-22,24-28 and 30-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 October 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-14, 16-22, 24-28, and 30-39 have been presented for examination and are rejected.

Response to Arguments

2. Applicant's arguments filed October 23rd, 2008, have been fully considered but they are deemed not persuasive.

3. In the remarks, applicant argued in substance that:

(A) The prior art of Krishnan does not teach a second condition that includes determining that the second direction is opposite to the first direction and passing a first threshold value in a first direction. Instead, Krishnan merely measures bandwidth usage and identifies a corresponding zone.

As to point (A), Krishnan teaches evaluating a second condition, which involves whether the server operation parameter passes a second threshold value in a second direction, wherein the second condition includes determining that the second direction is opposite to the first direction, and extends from the first threshold value to the second threshold value (Krishnan, col. 15, lines 39-56, where the server is evaluated for passing a second threshold value in an opposite direction; see also fig. 11 and col. 9,

lines 40-64). The threshold values are used to determine whether the obtained data has exceeded or fallen below certain levels, that is, whether they have passed a value in a direction or opposite to that direction.

Further, Applicant has not offered a persuasive reason as to why exceeding or falling below percentage threshold values fails to meet the claim limitation of "pass[ing] a second value in a second direction," beyond offering the cited passage of Krishnan. Passing a threshold value by exceeding or falling below a monitored numerical parameter would reasonably be interpreted as passing the value in a "direction" or "opposite" a direction. Applicant's specification further illustrates this point by defining movement in the same way as Krishnan (see, e.g., pages 13 and 14 where moving in a first "direction" is explained as exceeding "high threshold" numerical value).

(B) The prior art of Krishnan does not teach the limitations of the dependent claims that requires verifying a first condition and subsequently observing a grace period in which to determine that a second condition has or has not been verified. Krishnan merely discloses measuring a histogram of bandwidth usage with time intervals that are independent of other time intervals. Additionally, Krishnan and Smith fails to teach the limitations of the dependent claims that require terminating upon verifying a fourth condition and performing at a third rate not lower than the first rate.

As to point (B), Krishnan teaches the system further wherein the third condition of step c. comprises the fact the second condition has not been verified during a grace

period after the first condition has been verified, and the fourth condition of step d. comprises the fact the second condition has been verified after the third condition has been verified (Krishnan, col. 16, lines 4-24, where input request rejection is initiated; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13). Krishnan uses a histogram as part of a system that performs measurement over time, including taking action during a grace period after a first condition has been verified.

As to performing at a third rate not lower than the first rate, Smith teaches the system further wherein the fifth condition further comprises the fact that the server requests queue length remains substantially constant (Smith, col. 6, line 40 to col. 7, line 26), wherein said first and second threshold values are derived from said reference value of the server operation parameter (Smith, col. 8, lines 13-34, where resulting thresholds are derived), and wherein steps a1. and a2. are performed at a third rate (Smith, col. 8, lines 13-34, e.g., the rate used for the corresponding steps), and further, where the third rate is not lower than the first rate (Smith, col. 8, lines 13-34, e.g., the rate used for the corresponding steps).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application

filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7, 16-21, 30, 33, and 35-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishnan (U.S. Patent 6,961,341).

6. As per claims 1, 16, and 36, Krishnan teaches a method of managing overload in a server system, having a service operating in response to input requests, and a server operation parameter related to the operation of said service, the method comprising the steps of: (Krishnan, col. 5, lines 5-19 and fig. 3)

a. monitoring successive values of the server operation parameter as a function of time, (Krishnan, see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13)

b. from such values, b1. evaluating a first condition, which involves whether the server operation parameter passes a first threshold value in a first direction, and (Krishnan, col. 15, lines 39-56, where the server becomes overloaded by passing a first threshold value in a first direction; see also fig. 11 and col. 9, lines 40-64)

b2. evaluating a second condition, which involves whether the server operation parameter passes a second threshold value in a second direction, wherein the second condition includes determining that the second direction is opposite to the first direction, and extends from the first threshold value to the second threshold value, (Krishnan, col. 15, lines 39-56, where the server is evaluated for passing a second threshold value in an opposite direction; see also fig. 11 and col. 9, lines 40-64)

c. starting rejection of input requests, upon verification of a third condition, related to the verification of at least one of said first and second conditions, and (Krishnan, col.

16, lines 4-24, where input request rejection is initiated; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13)

d. terminating rejection of input requests upon verification of a fourth condition, related to the verification of said second condition (Krishnan, col. 16, lines 4-24, where input request rejection is terminated; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13).

7. As per claims 2 and 17, Krishnan teaches the system further wherein the third condition of step c. comprises the fact the first condition has been verified, and the fourth condition of step d. comprises the fact the second condition has been verified (Krishnan, col. 15, lines 39-56; see also fig. 11 and col. 9, lines 40-64).

8. As per claims 3 and 18, Krishnan teaches the system further wherein

the third condition of step c. comprises the fact the second condition has not been verified during a grace period after the first condition has been verified, and the fourth condition of step d. comprises the fact the second condition has been verified after the third condition has been verified (Krishnan, col. 16, lines 4-24, where input request rejection is initiated; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13).

9. As per claims 4 and 19, Krishnan teaches the system further wherein step b1. is performed at a first rate, and step b2. is performed at a second rate, not lower than the

first rate (Krishnan, col. 16, lines 4-24; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13).

10. As per claims 5 and 20, Krishnan teaches the system further wherein step b2. is performed within a time period starting upon verifying the first condition at step b1., and terminating upon verifying the fourth condition at step d (Krishnan, col. 16, lines 4-24; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13).

11. As per claims 6 and 21, Krishnan teaches the system further wherein said server operation parameter represents a quantity related to a memory usage in the server (Krishnan, col. 7, line 19 to col. 8, line 27; see also col. 10, lines 40-59).

12. As per claim 7, Krishnan teaches the system further wherein said server operation parameter represents a quantity related to the server throughput and to the server latency (Krishnan, col. 7, line 19 to col. 8, line 27; see also col. 10, lines 40-59).

13. As per claim 30, Krishnan teaches the system further comprising an overload manager object, having filter methods capable of implementing said request supervisor, a gauge monitor and further methods capable of implementing the monitoring function, the first logic function and the second logic function in cooperation with said gauge monitor (Krishnan, e.g., see figs. 6 and 8).

14. As per claim 33, Krishnan teaches the system further comprising an overload manager object related to a memory usage in the server (Krishnan, e.g., see figs. 6 and 8).

15. As per claim 35, Krishnan teaches a portal server having an overload manager device; a service operating in response to input requests; and a server operation parameter related to the operation of said service, wherein said device comprises: (Krishnan, col. 5, lines 5-19 and fig. 3)

a monitoring function for evaluating successive values of the server operation parameter as a function of time; (Krishnan, see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13)

a first logic function capable of evaluating a first condition, which involves whether the server operation parameter passes a first threshold value in a first direction; (Krishnan, col. 15, lines 39-56, where the server becomes overloaded by passing a first threshold value in a first direction; see also fig. 11 and col. 9, lines 40-64)

a second logic function capable of evaluating a second condition, which involves whether the server operation parameter passes a second threshold value in a second direction, wherein the second condition includes determining that the second direction is opposite to the first direction, and extending from the first threshold value to the second threshold value; and (Krishnan, col. 15, lines 39-56, where the server is evaluated for passing a second threshold value in an opposite direction; see also fig. 11 and col. 9, lines 40-64)

a request supervisor operable for: starting rejection of the input requests, upon verification of a third condition, related to the verification of at least one of said first and second conditions; and (Krishnan, col. 16, lines 4-24, where input request rejection is initiated; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13)

terminating rejection of the input requests upon verification of a fourth condition related to the verification of said second condition; and (Krishnan, col. 16, lines 4-24, where input request rejection is terminated; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13)

wherein said server operation parameter represents a quantity related to a memory usage in the server (Krishnan, col. 7, line 19 to col. 8, line 27; see also col. 10, lines 40-59).

16. As per claim 37, Krishnan teaches an overload manager device for use in a server system, having a service operating in response to input requests, and a server operation parameter related to the operation of said service, wherein said device is configured to: (Krishnan, col. 5, lines 5-19 and fig. 3)

compare values of the server operation parameter to a first threshold value; (Krishnan, see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13)

in response to detecting that the server operation parameter has passed the first threshold value in a first direction: (Krishnan, col. 15, lines 39-56, where the server becomes overloaded by passing a first threshold value in a first direction; see also fig. 11 and col. 9, lines 40-64)

compare values of the server operation parameter to a second threshold value, wherein the second threshold value is different from the first threshold value; (Krishnan, col. 15, lines 39-56, where the server is evaluated for passing a second threshold value in an opposite direction; see also fig. 11 and col. 9, lines 40-64)

start rejection of input requests in response to detecting the server operation parameter has not passed the second threshold value in a direction opposite the first direction during a grace period; and (Krishnan, col. 16, lines 4-24, where input request rejection is initiated; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13)

terminate rejection of input requests in response to detecting the server operation parameter has passed the second threshold value in a direction opposite the first direction during the grace period (Krishnan, col. 16, lines 4-24, where input request rejection is terminated; col. 9, lines 40-64; see, e.g., col. 16, line 60 to col. 17, line 37 and fig. 13).

17. As per claim 38, Krishnan teaches the system further wherein said server operation parameter represents a quantity related to a memory usage in the server (Krishnan, col. 7, line 19 to col. 8, line 27; see also col. 10, lines 40-59).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19. Claims 8-14, 22, 24-28, 34, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan (U.S. Patent 6,961,341) and Smith (U.S. Patent 5,878,224).

20. As per claim 8, Krishnan teaches the above, yet fails to teach the system further wherein step a. comprises deriving the server operation parameter from a given combination of the server throughput with the server latency.

Smith teaches a method for preventing overload of a network server by monitoring a server operation parameter (Smith, col. 2, lines 50-62) where the operation parameter is derived from a combination of the server throughput with the server latency (Smith, col. 5, lines 51-66; see col. 8, lines 22-49 formulations).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Krishnan and Smith to provide the overload calculations of Smith in the system of Krishnan, because doing so would allow a network overload system to reduce an incoming load to the maximum level it can comfortably handle in a way that overcomes the conventional techniques of less dynamic overload management (Smith, col. 2, lines 16-28 and 34-47).

21. As per claims 9 and 24, Krishnan-Smith teaches the system wherein step a. further comprises:

a1. maintaining a reference value of the server throughput and a reference value of the server latency, said reference values being updated upon verification of a fifth condition, comprising the fact that the current value of the server throughput does overlie its reference value, and a2. deriving a reference value of said server operation parameter from a combination of the reference value of the server throughput with the reference value of the server latency, said combination being of the same nature as said given combination (Smith, col. 7, lines 1-26 and col. 8, lines 21-34, where reference values are calculated).

22. As per claim 10, Krishnan-Smith teaches the system further wherein said server operation parameter is derived from the ratio of the server throughput to the reference value of the server latency and said reference value of the server operation parameter is derived from the ratio of the reference value of the server throughput to the reference value of the server latency (Smith, col. 7, lines 1-26 and col. 8, lines 21-34, where the ratio and reference values are calculated).

23. As per claims 11 and 26, Krishnan-Smith teaches the system further wherein the fifth condition further comprises the fact that the current value of the server latency does not overlie its reference value (Smith, col. 6, line 40 to col. 7, line 26).

24. As per claims 12 and 27, Krishnan-Smith teaches the system further wherein the fifth condition further comprises the fact that the server requests queue length remains substantially constant (Smith, col. 6, line 40 to col. 7, line 26).

25. As per claim 13, Krishnan-Smith teaches the system further wherein said first and second threshold values are derived from said reference value of the server operation parameter (Smith, col. 8, lines 13-34, where resulting thresholds are derived).

26. As per claims 14 and 28, Krishnan-Smith teaches the system further wherein steps a1. and a2. are performed at a third rate, wherein the third rate is not lower than the first rate (Smith, col. 8, lines 13-34, e.g., the rate used for the corresponding steps).

27. As per claim 22, Krishnan teaches the above, including wherein said server operation parameter represents a quantity related to the server throughput and to the server latency (Krishnan, col. 7, line 19 to col. 8, line 27), yet fails to teach the system further wherein the monitoring function is operable for deriving the server operation parameter from a given combination of the server throughput with the server latency.

Smith teaches a method for preventing overload of a network server by monitoring a server operation parameter (Smith, col. 2, lines 50-62) where the operation parameter is derived from a combination of the server throughput with the server latency (Smith, col. 5, lines 51-66; see col. 8, lines 22-49 formulations).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Krishnan and Smith to provide the overload calculations of Smith in the system of Krishnan, because doing so would allow a network overload system to reduce an incoming load to the maximum level it can comfortably handle in a way that overcomes the conventional techniques of less dynamic overload management (Smith, col. 2, lines 16-28 and 34-47).

28. As per claim 25, Krishnan-Smith teaches the system further wherein the server operation parameter is derived from the ratio of the server throughput to the reference value of the server latency and the first and second threshold values are derived from the ratio of the reference value of the server throughput to the reference value of the server latency (Smith, col. 7, lines 1-26 and col. 8, lines 21-34, where the ratio and reference values are calculated).

29. As per claim 34, Krishnan-Smith teaches the system further comprising an overload manager object related to the server throughput and to the server latency (Krishnan, col. 7, line 19 to col. 8, line 27).

30. As per claim 39, Krishnan teaches the above, yet fails to teach the system further comprising deriving the server operation parameter from a given combination of the server throughput with the server latency.

Smith teaches a method for preventing overload of a network server by monitoring a server operation parameter (Smith, col. 2, lines 50-62) where the operation parameter is derived from a combination of the server throughput with the server latency (Smith, col. 5, lines 51-66; see col. 8, lines 22-49 formulations).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Krishnan and Smith to provide the overload calculations of Smith in the system of Krishnan, because doing so would allow a network overload system to reduce an incoming load to the maximum level it can comfortably handle in a way that overcomes the conventional techniques of less dynamic overload management (Smith, col. 2, lines 16-28 and 34-47).

31. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan (U.S. Patent 6,961,341) and "Getting Started with the Java Dynamic Management Kit 4.2" (hereafter, "DMK").

32. As per claim 31, Krishnan teaches the above, including the use of a software implementation (Krishnan, col. 4, lines 57-67), yet fails to teach wherein the overload manager object, the gauge monitor and the further methods are instantiated from at least one generic class.

"Getting Started with the Java Dynamic Management kit 4.2" (hereafter "DMK") teaches the use of management objects that are instantiated from at least one generic class for use in network management systems, further including the use of MBean

objects and related programming constructs (DMK, pgs. 21-24; see specific discussion of dynamic MBean instantiation on the first half of page 23).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have combined Krishnan and DMK to provide the programming constructs of DMK in the system of Krishnan, because doing so would enable interoperable and dynamically extendable distributed management systems for monitoring network operations (DMK, pgs. 11-13).

33. As per claim 32, Krishnan-DMK teaches the system further wherein the overload manager object comprises at least one MBean (DMK, see discussion of MBeans on pgs. 21-24).

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Taylor whose telephone number is (571) 272-3889. The examiner can normally be reached on Monday-Friday, 8:00am to 5:30pm, with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/NT/
Nicholas Taylor
Examiner
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/Larry D Donaghue/
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